

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P292654

Luminaire Tested: **22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292654
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A19/156-UNV-L92765-W2A1-U-4500K
Description: GRLED 2x2 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1855.0 lumens
Efficiency: N/A
Efficacy: 118.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

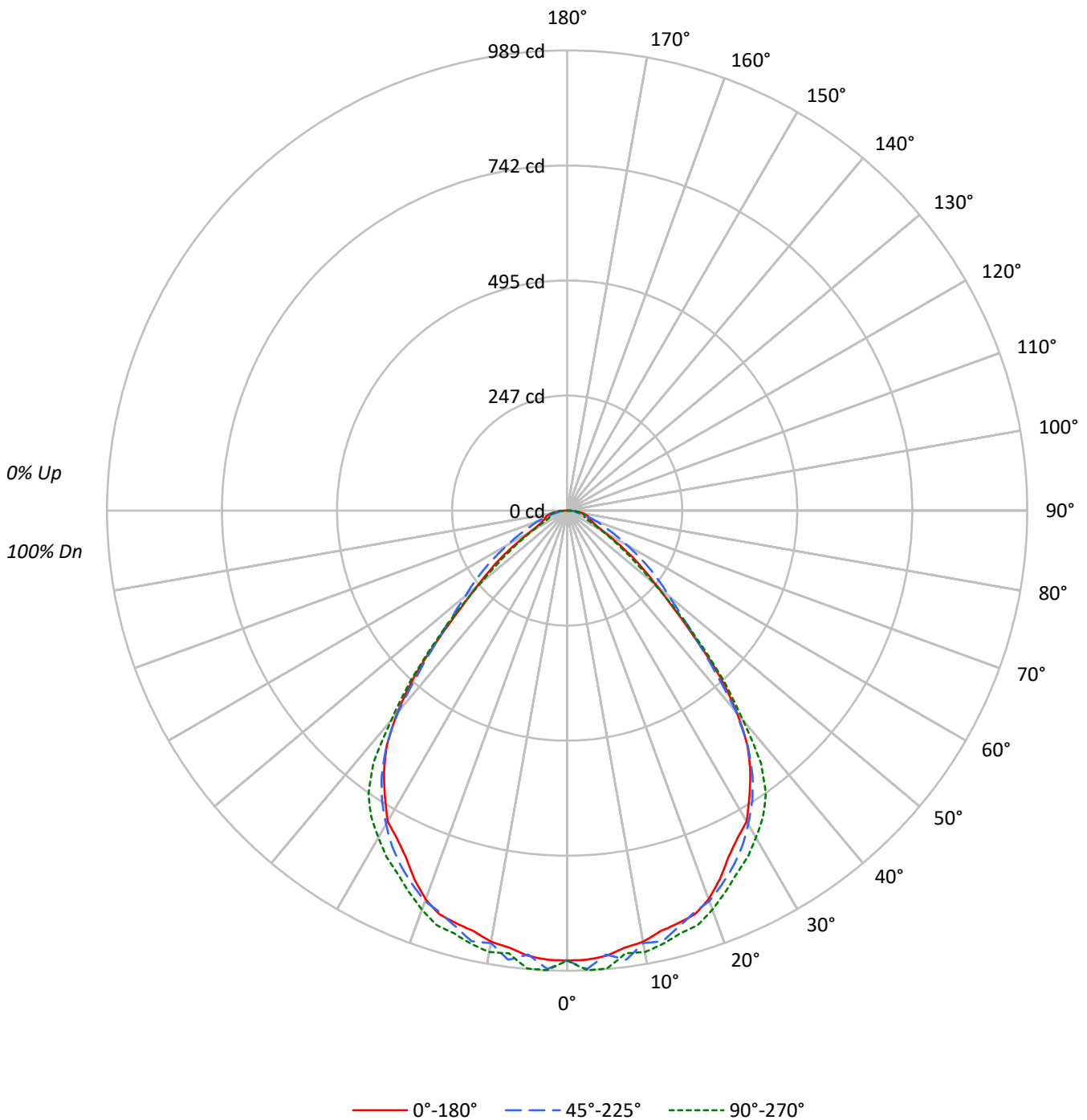
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2602	2602	2602
5°	2595	2587	2668
10°	2571	2578	2632
15°	2559	2579	2620
20°	2546	2558	2613
25°	2437	2506	2558
30°	2397	2419	2522
35°	2254	2283	2445
40°	1997	1984	2062
45°	1492	1495	1537
50°	1050	1195	1017
55°	775	1009	695
60°	484	798	454
65°	395	632	317
70°	392	526	313
75°	487	387	404
80°	542	305	494
85°	540	568	553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.0	5.0
10°-20°	262.1	14.1
20°-30°	388.2	20.9
30°-40°	434.9	23.4
40°-50°	319.5	17.2
50°-60°	178.6	9.6
60°-70°	99.6	5.4
70°-80°	58.5	3.2
80°-90°	21.5	1.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	742.4	40.0
0°-40°	1177.3	63.5
0°-60°	1675.5	90.3
0°-90°	1855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1855.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	961	979	958	977	988	91
15°	919	924	926	940	941	259
25°	821	827	844	856	861	380
35°	686	687	695	726	744	425
45°	392	424	393	421	404	306
55°	165	201	215	215	148	147
65°	62	110	99	127	50	64
75°	47	66	37	75	39	47
85°	18	26	18	24	18	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	966.8	966.8	966.8	966.8	966.8
2.5°	966.3	975.1	986.4	987.8	988.6
5°	960.7	978.6	957.6	977.3	987.8
7.5°	947.5	958.5	973.8	954.1	959.8
10°	941.0	943.6	943.6	968.1	963.3
12.5°	926.1	943.6	948.0	943.2	953.7
15°	918.7	924.4	925.7	939.7	940.6
17.5°	910.4	909.1	906.0	916.1	934.0
20°	889.0	884.2	893.3	905.6	912.6
22.5°	857.5	858.8	869.7	879.8	887.7
25°	820.8	827.4	844.0	855.8	861.4
27.5°	793.3	802.9	814.2	828.2	839.6
30°	771.4	770.5	778.4	798.5	811.6
32.5°	729.0	732.1	740.4	764.4	782.8
35°	686.2	686.6	694.9	726.4	744.3
37.5°	636.8	633.3	638.1	672.2	684.0
40°	568.6	569.5	564.7	588.7	587.0
42.5°	489.1	496.1	471.1	502.6	500.4
45°	392.0	423.9	392.9	420.9	403.8
47.5°	309.4	356.6	330.9	351.4	319.5
50°	250.9	299.4	285.4	294.6	243.0
52.5°	205.9	245.2	249.6	251.7	189.7
55°	165.2	201.0	215.0	214.6	148.2
57.5°	121.9	163.5	179.6	186.2	112.3
60°	90.0	135.9	148.2	162.6	84.4
62.5°	72.6	119.3	122.4	142.5	64.2
65°	62.1	110.1	99.2	127.2	49.8
67.5°	55.1	102.7	80.9	113.6	42.4
70°	49.8	91.3	66.9	101.8	39.8
72.5°	48.5	77.8	51.6	90.9	39.3
75°	46.8	66.0	37.2	74.7	38.9
77.5°	40.2	56.4	26.7	57.7	36.3
80°	35.0	45.0	19.7	43.3	31.9
82.5°	27.1	34.1	17.5	32.8	25.8
85°	17.5	25.8	18.4	23.6	17.9
87.5°	8.3	14.4	13.1	12.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)